

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
IP-Enabled Services	)	WC Docket No. 04-36

**REPLY COMMENTS OF THE NATIONAL ASSOCIATION  
OF STATE UTILITY CONSUMER ADVOCATES**

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**I. INTRODUCTION AND EXECUTIVE SUMMARY**

The comments filed in this proceeding make several points clear. First, the Federal Communications Commission (“Commission”) has jurisdiction over Internet Protocol (“IP”) based services provided to consumers in the United States, including those operating from foreign countries. Second, the Commission should not regulate IP-enabled services based on the type of technology used. Third, the Commission must regulate under Title II those IP-enabled services that utilize the public switched telephone network (“PSTN”) or otherwise present themselves as substitutes for traditional telephone service. And fourth, IP-enabled services that serve as substitutes for traditional telephone service must give consumers the same service quality and consumer protections as traditional telephone service. In these Reply Comments, the National Association of State Utility Consumer Advocates (“NASUCA”) responds to several arguments that misrepresent the nature of the marketplace or the need for regulation of Voice over Internet Protocol (“VoIP”) service. The Commission must not ignore the fundamental public interest in communications.

VoIP has the potential to revolutionize the means of daily communications for millions of consumers. The benefits of that potential are already being realized by an increasing percentage of the population. VoIP has provided the opportunity for consumers to experience new features and services in their communications at a price that is often less than comparable bundles offered by other providers. The increasing number of people using VoIP is a testament to the apparent benefits of the service and its appeal to consumers. The benefits of VoIP are likewise increasing as more service providers unveil additional services that are available to customers. It is quite likely that all, if not a substantial majority, of telecommunications could occur using VoIP or similar IP-enabled services in the future.

Although VoIP services that require broadband Internet connections and are offered in only bundled packages with many features may decrease the overall combined costs of all of the services purchased (e.g., voice services bundled with wireless, cable TV, internet access, etc.), bundling nonetheless raises the overall monthly costs for consumers to receive these services. A large percentage of consumers may be unable or unwilling to pay extra for broadband-based VoIP, and opt instead for plain old telephone service (“POTS”). These consumers must continue to have access to a safe and adequate telephone system at just and reasonable prices. The key to the Commission’s determination in this proceeding is to allow for the proliferation of VoIP services and its benefits while also preserving the fundamental principles of universal service and consumer protection that currently exist.

NASUCA is particularly concerned that a deregulated VoIP service may greatly erode the web of mechanisms that support a range of social goals from E911 to universal

service. That is, to the extent that consumers migrate from traditional wireline telephone services to VoIP services, the support from traditional wireline customers will decrease, causing the cost of support for those who remain with traditional wireline carriers to increase, thus creating a competitive disadvantage for traditional service. The potential benefits of VoIP should not be offset by the loss of telephone service to some consumers whose basic local service rates increased due to the loss of support mechanisms. In addition, the loss of essential public protection services such as E911 and services for the disabled and low-income should not be the *quid pro quo* for any potential benefits from VoIP services.

The Commission must create a balance among these issues but, in doing so, must focus on its fundamental purpose of “making available, so far as possible, to all the people of the United States, without discrimination .... a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of ... promoting safety of life and property.”<sup>1</sup> Congress has specifically directed the Commission to make universal service available at “just, reasonable and affordable rates.”<sup>2</sup> These objectives must remain paramount throughout this process.

## **II. APPLICATION OF TITLE II REGULATION TO VOIP IS APPROPRIATE.**

There are two primary reasons why Title II regulation should be applied to VoIP. First, VoIP fits the definition of “telecommunications services,” which are subject to Title

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<sup>1</sup> 47 U.S.C. § 151.

<sup>2</sup> 47 U.S.C. § 254(b)(1).

II. Second, VoIP services are voice communications services functionally equivalent to and substitutable for plain old voice telephone service. The majority of comments confirm that Title II should apply.

**A. Incidental Protocol Conversions Do Not Cause VoIP Voice Services to Change from Telecommunications Services into Information Services.**

In its Comments, Vonage claims that it is providing an information service because it engages in protocol conversion.<sup>3</sup> Vonage claims that its business is not the provision of voice service, but instead, “[i]ndeed, distilled to its essence, Vonage’s business is protocol conversion.”<sup>4</sup> Vonage’s argument is contradicted by its massive advertising campaign that touts the company’s provision of telephone service.<sup>5</sup>

Vonage’s assertion is without merit. Following Vonage’s reasoning, an Incumbent Local Exchange Carrier (“ILEC”) could claim that it is in the protocol conversion business because local exchange service consumers purchase analog to digital conversion. It is clear that the Vonage or the AT&T CallVantage business model would not function if those services were not specifically designed, built, and sold as POTS replacements. Vonage’s semantic argument cannot allow it to escape its obligations as a telecommunications services provider.

Similarly, bundling service components together does not render the underlying voice service an information service, as AT&T contends.<sup>6</sup> The addition of voice mail or other call management features to ILEC local exchange service does not cause local

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<sup>3</sup> Vonage Comments at 25.

<sup>4</sup> *Id.*

<sup>5</sup> See [http://www.vonage.com/no\\_flash/index.php](http://www.vonage.com/no_flash/index.php). Indeed, “protocol conversion” is not even mentioned on Vonage’s home page.

<sup>6</sup> AT&T Comments at 18-20.

exchange service to become an information service. Although AT&T's "talking e-mail" is intriguing as a communications product, it does not alter the regulatory classification of the voice services that access the e-mail.<sup>7</sup> Vonage's and AT&T's mis-portrayals of their services cannot redefine their VoIP voice services as information services.

VoIP voice services that provide POTS are, at their core, voice communications services in every fashion and are sold as such – they are not information services. As will be discussed below, the protocol processing and conversion employed by services like Vonage and AT&T's CallVantage fail to meet the requirements of the information service definition in every manner because they provide *no net conversion to the end user*. The essence of these services is not protocol conversions, but rather a voice service replacement. Most VoIP services are designed so that the calling and called party may continue to use a standard telephone and handset. Any new protocols or equipment are entirely transparent to the end users.

**B. The Existence of Protocol Conversions Within a Service Offering Do Not Mandate an Information Service Classification for That Service.**

"Protocol conversion" occurs in all voice telephone calls; even the most basic telephone calls convert the human voice from a mechanical vibration in the handset into 1) an electrical waveform, 2) that may then be converted into a digital representation of that waveform, 3) that may then be converted into an optical signal for transport over fiber optic cable. Protocol conversions occur within all telephone calls, and none of those conversions transforms voice calls from telecommunications services into information services.

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<sup>7</sup> *Id.* at 19.

Vonage portrays these incidental protocol conversions as having a profound impact on the regulatory classification of the voice telephone service that it provides.<sup>8</sup> Vonage claims that because of these types of conversions, its voice grade telephone service should be found to be an unregulated information service. To the contrary: Vonage's service is the epitome of telecommunications services that incidentally use the Internet for transmission.

Any useful discussion of protocol processing or conversion must necessarily start with the definition of information service in the Telecommunications Act of 1996 ("1996 Act").<sup>9</sup> That definition is statutory, even though Congress considered prior Commission orders and decisions to develop that definition. The 1996 Act provides:

The term 'information service' means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.<sup>10</sup>

As discussed below, the Commission has determined that the protocol conversions occurring incident to real-time voice transmissions are meaningless in regard to this definition. The Commission's findings directly contradict Vonage's position on this matter.

In the 1998 *Stevens Report*, the Commission noted, "The protocol processing that takes place incident to phone-to-phone IP telephony does not affect the service's classification, under the Commission's current approach, because it results in no net

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<sup>8</sup> Vonage Comments at 26.

<sup>9</sup> Pub. L. No. 104-104, 110 Stat. 56

<sup>10</sup> 47 U.S.C. § 153(20).



protocol conversion to the end user.”<sup>11</sup> In a similar vein, in its *Cable Modem Order*, the Commission reasoned that the distinctions between “Information Services” and “Telecommunications Services” rest “on the functions made available.”<sup>12</sup> The Commission arrived at that conclusion by noting that “Congress’s direction that the classification of a provider should not depend on the type of facilities used . . . [but] rather on the nature of the service being offered to consumers.”<sup>13</sup>

The Commission recently applied this Congressional directive in its *AT&T Order*.

The Commission described the protocol processing as follows:

When the call reaches AT&T’s network, AT&T converts it from its existing format into an IP format and transports it over AT&T’s Internet backbone. AT&T then converts the call back from the IP format and delivers it to the called party through local exchange carrier (LEC) local business lines.<sup>14</sup>

Regarding this protocol conversion, the Commission relied on its earlier determination in the *Non-Accounting Safeguards Order* that “certain protocol processing services that result in no net protocol conversion to the end user are classified as basic services; those services are deemed telecommunications services.”<sup>15</sup> The Commission further stated that “[t]he protocol processing that takes place incident to phone-to-phone IP telephony does not affect the service’s classification, under the Commission’s current approach, because it results in no net protocol conversion to the end user.”<sup>16</sup>

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<sup>11</sup> *Federal-State Joint Board on Universal Service*, CC Docket 96-45, Report to Congress, 13 FCC Rcd 11501 (1998) (“*Stevens Report*”), ¶ 52.

<sup>12</sup> *Internet Over Cable Declaratory Ruling*, Declaratory Ruling, 17 FCC Rcd 4798(2002) (“*Cable Modem Order*”), ¶ 35.

<sup>13</sup> *Id.*, ¶ 35, n. 140.

<sup>14</sup> *Petition for Declaratory Ruling that AT&T’s Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, WC Docket No. 02-361, Order, 19 FCC Rcd 7457 (2004) (“*AT&T Order*”), ¶ 1

<sup>15</sup> *Id.*, ¶ 7.

<sup>16</sup> *Id.*

The Commission squarely decided that no net protocol conversions are present in AT&T's service:

We clarify that AT&T's specific service is a telecommunications service as defined by the Act. AT&T offers "telecommunications" because it provides "transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." And its offering constitutes a "telecommunications service" because it offers "telecommunications for a fee directly to the public." Users of AT&T's specific service obtain only voice transmission with no net protocol conversion, rather than information services such as access to stored files. More specifically, AT&T does not offer these customers a "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information;" therefore, its service is not an information service under section 153(20) of the Act. End-user customers do not order a different service, pay different rates, or place and receive calls any differently than they do through AT&T's traditional circuit-switched long distance service; the decision to use its Internet backbone to route certain calls is made internally by AT&T. To the extent that protocol conversions associated with AT&T's specific service take place within its network, they appear to be "internetworking" conversions, which the Commission has found to be telecommunications services. We clarify, therefore, that AT&T's specific service constitutes a telecommunications service.<sup>17</sup>

This language is quite clear regarding protocol processing issues. Vonage customers dial North American Numbering Plan ("NANP") numbers, or other international telephone numbers, and may connect to any other telephone in the world to conduct a voice telephone call. As with AT&T's service, the choice of how to route that call is entirely in the hands of Vonage, and the protocol conversions employed by Vonage are strictly for the purpose of completing the voice call.

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<sup>17</sup> *Id.*, ¶ 12 (emphasis added).

The Commission's treatment of frame relay service clearly illustrates that protocol conversion is not the defining indicium of information services. In 1995, the Commission examined frame relay:

Frame relay is a relatively new, high-speed packet-switching technology used to communicate digital data between, among other things, geographically dispersed local area networks (LANs). In addition, frame relay technology often serves as the intermediary format for data traveling between different computer systems employing different communications protocols.

As the term suggests, frame relay networks communicate "frames" containing digital data. The format of a frame-defined by a specific interface protocol-consists of a beginning "flag," a "header," a variable length data field, a "trailer," and an ending "flag." The header contains routing and congestion control information, while the trailer holds an error control sequence enabling detection of errors within frames.<sup>18</sup>

The Commission's description of frame relay service clearly provides that this service is a telecommunications service even though it facilitates computer-to-computer communications.

The Commission discussed the particular frame relay service protocol conversions discussed in that *Memorandum Opinion and Order* as follows:

For those customers whose CPE is not equipped to provide the network with frame format data, AT&T provides a variety of protocol conversion functions permitting communication with the frame relay network. Some conversion functions are performed at both ends of the network. That is, a customer may provide data to the network in a foreign protocol, the network converts the data into frame relay protocol, transmits the data across the network, and then converts the data back to the original foreign protocol before delivering the data out of the network. Other conversions

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<sup>18</sup> *In The Matter of Independent Data Communications Manufacturers Assoc. Inc.*, Memorandum Opinion and Order, 10 FCC Rcd 13717, 13718 (1995) (emphasis added).

take place only at the originating end of the transmission, or only at egress from the network.<sup>19</sup>

The Commission concluded that this service was a basic service, and that AT&T was required to tariff it regardless of whether it was offered alone or in conjunction with enhanced protocol processing.<sup>20</sup>

It is clear that Vonage's interpretation of Commission precedent is in error. Conversion from one protocol to another, or even several conversions in a series, does not require an information service classification for purposes of the 1996 Act.

**C. The Information Services Definition Excludes Protocol Processing and Conversion Used to Manage Voice Telephone Calls.**

The 1996 Act's definition of "information service" excludes the incidental processing used "for the management, control, or operation of a telecommunications system or the management of a telecommunications service."<sup>21</sup> Vonage's discussion of protocol processing in its Comments ignores this strict exclusion. All protocol processing occurring during these voice calls occurs for the purposes of managing a voice telephone call from one location to another, as is described in this portion of the information services definition. This wholly excludes VoIP voice services from the information services definition.

Vonage also claims that it engages in protocol processing when a call originates on the PSTN, and then terminates with a Vonage customer. There, Vonage states that it "must also identify the IP address associated with the Vonage customer being called, and encode that information onto the Internet data stream. This address identification

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<sup>19</sup> *Id.* at 13718-19 (footnotes omitted) (emphasis added).

<sup>20</sup> *Id.* at 13722.

<sup>21</sup> 47 U.S.C. § 153(20).

requires Vonage to access and process stored information.”<sup>22</sup> Vonage fails to explain how this is any different from a database dip associated with a LEC’s number porting obligations, or the ordinary routing of a telephone call to a distant switch based upon routing information stored, retrieved, and utilized within the switch. Such processing is clearly part of the management, control, or operation of a telecommunications system. The Commission’s reasoning in the *Non-Accounting Safeguards Reconsideration*<sup>23</sup> shows that Vonage is in error. There, the Commission stated:

We note that, under Computer II and Computer III, we have treated three categories of protocol processing services as basic services, rather than enhanced services. These categories include protocol processing: 1) involving communications between an end user and the network itself (e.g., for initiation, routing, and termination of calls) rather than between or among users; 2) in connection with the introduction of a new basic network technology (which requires protocol conversion to maintain compatibility with existing CPE); and 3) involving internetworking (conversions taking place solely within the carrier’s network to facilitate provision of a basic network service, that result in no net conversion to the end user).

Because the listed protocol processing services are information service capabilities used “for the management, control, or operation of a telecommunications system or the management of a telecommunications service,” they are excepted from the statutory definition of information service. These excepted protocol conversion services constitute telecommunications services, rather than information services, under the 1996 Act.<sup>24</sup>

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<sup>22</sup> Vonage Comments at 26.

<sup>23</sup> *In The Matter of the Non-Accounting Safeguards of Section 271 and 272 of the Communications Act of 1934, as Amended*, Order on Reconsideration, 12 FCC Rcd 2297 (1997).

<sup>24</sup> *Id.* at 2298-99.

Thus, even if Vonage does engage in protocol processing, its VoIP voice services are nevertheless basic services under Commission precedent prior to the 1996 Act, and are telecommunications services under the 1996 Act.<sup>25</sup>

**D. Title II Should Apply to VoIP Services That Are Functionally Similar to or Substitutable for Traditional Telephone Service.**

Commenters generally support NASUCA's position that Title II regulation should be applied to IP-enabled services that are functionally similar to, and substitutable for, telephone service.<sup>26</sup> Some, however, argue against using functionality as a basis for categorization. The Commission should reject these parties' arguments.<sup>27</sup>

Z-Tel asserts that the functionality approach is contrary to the 1996 Act and Commission precedent.<sup>28</sup> Z-Tel is wrong. The functionality approach is entirely consistent with both the 1996 Act and Commission precedent, and is in fact required by the 1996 Act.<sup>29</sup> As the CPUC recognizes, a fundamental principle of the 1996 Act is that regulation must be technology neutral: "[T]he nature of a service depends on whether it meets the particular definitional sections of the Act, not on the technology used to provide the service or the facilities used to deploy it."<sup>30</sup> The Commission itself has

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<sup>25</sup> In its Comments, Vonage attempts to analogize its voice services to those of pulver.com's Free World Dial-Up ("FWD") to show that it too is an information service. This argument is addressed in detail in section III.

<sup>26</sup> See, e.g., Arizona Corporation Commission ("ACC") Comments at 6-7; Cisco Systems Comments at 10; Cox Comments at 14-29; California Public Utilities Commission ("CPUC") Comments at 14-29; Communications Workers of America ("CWA") Comments at 4, 6-11; Information Technology Association of America Comments at 3-6; National Association of Regulatory Utility Commissioners ("NARUC") Comments at 4-7; Rehabilitation Engineering Research Center on Telecommunications Access Comments at 24-26; Sprint Comments at 7-8; Vermont Public Service Board ("VPSB") Comments at 5-11; Virginia State Corporation Commission ("VSCC") Comments at 3-5.

<sup>27</sup> NASUCA Comments at 3-9.

<sup>28</sup> Z-Tel Comments at 6-7.

<sup>29</sup> NARUC Comments at 5-7; Earthlink Comments at 10-16.

<sup>30</sup> CPUC Comments at 18.

observed, “the classification of a service under the 1996 Act depends on the functional nature of the end-user offering.”<sup>31</sup> And, as noted in NASUCA’s opening comments, as early as 1980 in *Computer II*,<sup>32</sup> the Commission recognized that the nature of a service depends on how it is used by the customer, rather than the specific equipment or protocols utilized in the underlying transmission of the service.<sup>33</sup>

The Electronic Frontier Foundation (“EFF”) argues that functional equivalence or substitutability are not “useful or appropriate factors” for categorizing or differentiating among IP-enabled providers. EFF asserts that 1) these factors are defined by reference to wireline telephony; 2) applying these factors will be difficult in practice; and 3) the Commission appears to contemplate using these factors on a relatively small scale, i.e., only to differentiate services, and this “may not give sufficient attention to the larger terrain in which IP-enabled services live and thrive.”<sup>34</sup>

EFF offers no explanation of why it is inappropriate to consider factors such as functionality and substitutability simply because they are “defined by reference to wireline telephony.” Given that many of the most widely marketed VoIP services are offered to the general public as substitutes for wireline telephony, and millions of Americans are being encouraged to subscribe to IP-enabled voice services with the promise that they can use the service in the same manner as their existing service, it is entirely appropriate to rely on these criteria. Any difficulty involved in applying these factors will be no greater than the difficulty involved in applying any other criteria. The

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<sup>31</sup> *Stevens Report*, ¶ 86.

<sup>32</sup> *In the Matter of Amendment of Section 64.702 of the Commission’s Rules and Regulations*, Docket No. 20828.

<sup>33</sup> See NASUCA Comments at 19-20.

<sup>34</sup> EFF Comments at 4-5.

difficulty of an action cannot remove the significant public policy reasons for doing it, as NASUCA (and numerous other parties) amply explained in opening comments.<sup>35</sup>

NASUCA agrees with the EFF that “sufficient attention” should be given to the “larger terrain in which IP services live and thrive.” However, EFF is putting the cart before the horse. There is no valid reason for avoiding the fundamental fact that virtually every telecommunications service is likely to be provided over networks that use, at least in part, Internet protocols, to transmit services. The ability of every American to have reliable, affordable voice service – and the associated ability to reach emergency service providers – is a very large part of the larger terrain, and arguably the most important. Applying Title II regulation to VoIP services that are functionally similar to or a substitute for existing telephone service is the best way to ensure that this fundamental objective is achieved.

Many parties, including AT&T, encourage the Commission to adopt the “layers” approach advocated by MCI. Their comments suggest that adopting the “layers” approach implies that the Commission should not adopt the functionality and substitutability categorization for POTS and POTS-like services. However, MCI itself disagrees, in part, with this position:

[S]ome IP-enabled voice applications may potentially be viewed as a substitute for traditional common carrier voice services, and narrowly focused regulation to advance an express purpose of Title II in those cases could be an appropriate exercise of the Commission’s ancillary jurisdiction. Specifically, in instances where customers are assigned a number on the North American Numbering Plan so that customers using ordinary telephones can make calls to users of the voice application, and where the service is sold as and understood to be a substitute for POTS service, it

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<sup>35</sup> See, e.g., National Governors Association Comments (“NGA”) at 7; Texas Attorney General (“TXAG”) Comments at 2-3; New York Attorney General (“NYAG”) Comments at 5-6, 14.



may be reasonable to conclude that the voice application is a close enough competitor to telephone service that the Commission can assert its ancillary jurisdiction to fulfill an express statutory purposes (sic) of Title II.<sup>36</sup>

AT&T and several other parties also argue that Title II regulation should not be applied to any “applications” – i.e., services – provided over IP-enabled networks.

AT&T’s argument is disingenuous, however, because AT&T also argues that the underlying IP networks of the ILECs are basic transmission services and thus should be regulated under Title II.<sup>37</sup> In making its case, AT&T dismisses SBC’s contention that all IP services are information services because IP networks in general have the capability of “generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications.” Instead, AT&T argues, “[I]t would be folly – and reversible error – for the Commission to rule that all facilities and services magically attain Title I status once they are ‘IP-enabled.’”<sup>38</sup>

NASUCA could not agree more. But AT&T wants to have its cake and eat it too. AT&T admits that SBC’s network is a telecommunications network. There is no doubt that SBC is using its IP enabled network to carry telecommunications services. And, as the Commission has found, there is no doubt that under the definitions and principles of the 1996 Act, AT&T is also providing telecommunications services over its IP network. The Commission must apply Title II regulation evenly to all similar telecommunications services.

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<sup>36</sup> MCI Comments at 34.

<sup>37</sup> See AT&T Comments at 7, 58-63.

<sup>38</sup> *Id.* at 62.

This point is particularly relevant given that Verizon has recently announced that it is deploying packet switching to replace its circuit switched network in California and Washington. Verizon's June 22, 2004 press release states:

The state-of-the-art technology will make Verizon's network more reliable, and the new switches pave the way for a broad array of new services for local businesses and consumers in the future. The new packet switches will replace existing technology known as circuit switches. Telecommunications switches are at the heart of Verizon's networks and direct voice traffic from the person making to the call to the person being called.

Company technicians are currently installing packet-switching systems in five southern California communities: Temecula, Elsinore, Homeland, Baldwin Park and Azusa. Installation of a sixth packet switch is also under way in Mount Vernon, Wash. The six switches – provided by Nortel Networks – are expected to come on line later this year.

Customers served by the new packet switches in California and Washington will continue to receive the same voice and data services at the same price, and customers will not be required to change equipment.

Verizon obviously plans to offer services over its new IP network that are, from the perspective of the customer, identical to the services it provides today. There is also no doubt about the need to regulate the voice services provided by Verizon. There is also no doubt that the service proposed by Verizon, which does not require the purchase of an expensive broadband connection, will not face effective price competition from other much more expensive types of VoIP offerings, such as those of Vonage. If the proposal of AT&T, Z-Tel, EFF and others to reject the functionality and substitutability criteria were adopted, no commission would have the authority to regulate Verizon's monopoly service. The Commission should not go down this path.

### **III. VONAGE AND AT&T CALLVANTAGE ARE NOT SIMILAR TO PULVER’S FREE WORLD DIAL-UP SERVICE AND SHOULD NOT BE CLASSIFIED SIMILARLY.**

In their respective Comments, both Vonage and AT&T state that their VoIP services are similar to pulver.com’s FWD in an attempt to receive the same regulatory treatment that FWD received recently from the Commission.<sup>39</sup> In the *Pulver Order*, the Commission determined that pulver.com’s FWD offering is an unregulated information service subject to the Commission’s jurisdiction.<sup>40</sup> The Commission formalized the Commission’s policy of nonregulation to ensure that “Internet applications” remain insulated from unnecessary and harmful economic regulation at both the state and federal levels.<sup>41</sup> As discussed further below, this Commission made clear in the *Pulver Order* that its determination was limited only to FWD service. Now, the Commission must emphasize that its determination in the *Pulver Order* is limited to FWD and does not determine the regulatory treatment given to the VoIP services provided by Vonage and AT&T in this proceeding. The arguments by Vonage and AT&T to the contrary are without merit and should be rejected.

Vonage draws several parallels between its VoIP service and FWD by stating:

There are many IP-enabled services that resemble Pulver’s service, including Vonage’s service. ... Similar to FWD, Vonage customers can only access the service over broadband Internet connections provided by third parties, such as that provided by DSL and cable modem service providers. Further, once a Vonage customer signs up for service, the number utilized by the Vonage customer is “completely portable to any broadband-accessible location to

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<sup>39</sup> *Petition for Declaratory Ruling that pulver.com’s Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, WC Docket No. 03-45, Memorandum Opinion and Order, 19 FCC Rcd 3307 (2004) (“*Pulver Order*”).

<sup>40</sup> *Id.*, ¶1.

<sup>41</sup> *Id.*

which that member may go.” Accordingly, this characteristic of Vonage’s service is identical to FWD....<sup>42</sup>

Vonage also compares its VoIP service to Pulver’s FWD when it argues that “VoIP services are properly classified as ‘Information Services’ under the 1996 Act and by Commission precedent.”<sup>43</sup> In making that argument, Vonage claims that both its VoIP service and FWD access and process stored information and that “Pulver offers a service that, like Vonage’s, facilitates voice communications between users on the Internet.”<sup>44</sup> Vonage argues that FWD has “similar functions [that] are intrinsic to Vonage’s service.”<sup>45</sup> Finally, Vonage compares its VoIP service to FWD in its argument that the Commission should reform the intercarrier compensation system prior to applying it to VoIP services.<sup>46</sup> In making that argument, Vonage argues that the physical location of users of FWD can continually change as long as they have access to a broadband connection, just like customers of Vonage’s VoIP service.<sup>47</sup>

AT&T argues that its “residential and enterprise VoIP offerings are plainly ‘information services’ within the meaning of section 3(20).”<sup>48</sup> AT&T then argues that its CallVantage service is analogous in all relevant respects to FWD. AT&T argues:

Like pulver.com, the AT&T CallVantage service offering is a “bring your own broadband” service. AT&T CallVantage service end-users, like pulver.com’s, use their own end-user devices (their computers and telephone adapters) to “establish the actual connection” with others through their pre-existing connection to the Internet. Like pulver.com, AT&T CallVantage service

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<sup>42</sup> Vonage Comments at 16.

<sup>43</sup> *Id.* at 23-36.

<sup>44</sup> *Id.* at 28.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.* at 45-47.

<sup>47</sup> *Id.* at 45-46.

<sup>48</sup> AT&T Comments at 18. Section 3(20) is 47 U.S.C. §153(20).

facilitates connections to others who are connected to the Internet (so-called “computer-to-computer” communications), and it provides numerous data storage features that allow its end-users to manage these communications.<sup>49</sup>

AT&T then asserts, “the fact that AT&T may provide these information services in part ‘via’ its own ‘telecommunications’ (i.e., over its own IP backbone facilities) does [sic] make them any less an information service.”<sup>50</sup>

None of Vonage’s or AT&T’s comparisons to FWD, however, are valid so as to warrant similar regulatory treatment. In particular, in addressing pulver.com’s FWD service, the Commission specifically stated that its determination regarding FWD was limited to that particular application. More specifically, the Commission stated:

We reach our holdings in this Order based on FWD as described by Pulver in its petition and subsequent *ex partes*. We thus limit the determinations in this Order to Pulver’s present FWD offering (only to the extent expressly described below), without regard to any possible future plans Pulver may have. Furthermore, this declaratory ruling addresses FWD only to the extent that it facilitates free communications over the Internet between one on-line FWD member using a broadband connection and other on-line FWD members using a broadband connection. Therefore, we specifically decline to extend our classification holdings to the legal status of FWD to the extent it is involved in any way in communications that originate or terminate on the public switched telephone network, or that may be made via dial-up access.<sup>51</sup>

As such, the Commission was clear to limit its determination in the *Pulver Order* specifically to FWD as a free service that does not interconnect to the PSTN. Vonage and AT&T should not be allowed now to shoehorn their paid services that use the PSTN into that determination.

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<sup>49</sup> *Id.* (citations omitted).

<sup>50</sup> *Id.* at 19.

<sup>51</sup> *Pulver Order* at n. 3 (citations omitted, emphasis added); see also *id.* at n. 55 (“we note that this conclusion is confined to the FWD services as described in this Order”).

In the *Pulver Order*, the Commission noted that FWD is an Internet application used to engage in peer-to-peer communications that are restricted *to other FWD members*.<sup>52</sup> In fact, the *Pulver Order* extensively refers to communications via FWD as being between “members.”<sup>53</sup> The fact that FWD is only used by members is appropriate to highlight because the communications between FWD members are made solely over IP-to-IP connections without involvement of the PSTN. On the other hand, Vonage’s VoIP service and AT&T’s CallVantage both involve communications that occur using IP-to-PSTN connections. FWD cannot be used to call a non-FWD member. This is a key distinction between FWD and the Vonage and AT&T VoIP services; this distinction warrants separate regulatory treatment.

It is true that FWD, Vonage and CallVantage services do have features in common: no geographic correlation to any particular underlying physical transmission facility; users must have an existing broadband connection; users must install computer software; and providing telecommunications-type services such as voice mail and bridging capabilities, among other things. However, the FWD service is limited to the finite circle of other FWD members. While Vonage’s VoIP service may have things in common with Pulver’s FWD, such similarities are not sufficient to warrant similar regulatory treatment given, among other things, the Commission’s specific distinction

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<sup>52</sup> *Id.*, ¶ 4-5.

<sup>53</sup> See, e.g., *id.*, ¶ 6 (“FWD acts as a directory or translation service, informing its *members* when other *members* are online or ‘present,’ thus able to receive a call, as well as informing them of the Internet address necessary to reach other *members* during their on-line presence. . . . Pulver indicates that FWD is merely an Internet application that provides its *members* information that those *members* use to communicate with other *members*”) (emphasis added) and ¶ 11 (“FWD makes available to its *members* information that enables them to determine whether other *members* are available to talk; information on how to contact other *members*; and an optional voicemail capability that enables *members* to leave messages for unavailable *members* who have chosen this feature.”) (emphasis added).

between FWD and other IP-enabled services in its *Pulver Order* as discussed above. The ability to call parties on the PSTN that have no relationship to Vonage or CallVantage service is an essential feature and selling point of these services. In fact, AT&T specifically notes that its CallVantage service allows the customer to make and receive calls from anyone, including PSTN-connected customers.<sup>54</sup> Vonage and CallVantage are marketed as a substitute telephone service, while Pulver's service is not.

In making its argument that its VoIP service is similar to FWD, Vonage argues that Congress clearly intended IP-enabled services to remain unfettered by federal or state regulation.<sup>55</sup> Vonage argues that Section 230 of the 1996 Act represents "Congress's clear intention that such services remain 'unfettered' by federal or state regulation."<sup>56</sup> However, this argument presumes that Vonage's VoIP service is an "Internet [or] other interactive computer service" that Congress was specifically addressing in Section 230(b) of the 1996 Act. As discussed above, the Commission has specifically determined that FWD is an Internet application to which Section 230(b) applies. However, Vonage's VoIP service is not an "Internet [or] other interactive computer service" to which Section 230(b) applies. Vonage's presumption here is premature and incorrect.

Vonage also fails to note that FWD requires a series of codes and passwords for use, whereas Vonage users apparently simply dial NANP numbers to complete calls. There is no clear analogy between the services of Vonage and pulver.com.

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<sup>54</sup> AT&T Comments at 12.

<sup>55</sup> Vonage Comments at 14.

<sup>56</sup> *Id.* at 14, citing 47 U.S.C. § 230(b)(2) ("It is the policy of the United States to preserve a vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.").

It is clear then that the VoIP services provided by Vonage and AT&T are not sufficiently similar to FWD such that they should receive the same deregulatory treatment. As such, and for other reasons as well, Vonage's VoIP service and AT&T's CallVantage should receive separate regulatory treatment than pulver.com's FWD.

#### **IV. FEDERAL AND STATE REGULATION OF VOIP IS NECESSARY.**

Several Regional Bell Operating Companies ("RBOCs") urge the Commission to view VoIP as a telephone market separate from traditional wireline service.<sup>57</sup> The RBOCs assert that ILECs are not "incumbents" in providing IP services, and thus lack market power regarding those services.<sup>58</sup> The RBOCs join other VoIP interests in urging the Commission to refrain from imposing Title II regulation on VoIP that would "undermin[e] incentives for continued innovations that will, in turn, limit choices that consumers will have."<sup>59</sup> It is clear from recent announcements, however, that VoIP may soon become a replacement for traditional wireline service.

Many VoIP interests claim that competition would be the best regulator of VoIP.<sup>60</sup> Some commenters point to the wireless industry as an example of how competition has succeeded in providing consumer benefits.<sup>61</sup>

This argument fades when light is cast upon it, however. At least two sources show the wireless industry's poor record of service. The University of Michigan's most

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<sup>57</sup> See Verizon Comments at 25.

<sup>58</sup> *Id.*

<sup>59</sup> *Id.* at 30.

<sup>60</sup> See, e.g., Qwest Comments at 4-5; Net2Phone Comments at 19-22; Computer and Communications Industry Association Comments at 15.

<sup>61</sup> See, e.g., CTIA Comments at 8.



recent customer satisfaction survey ranked wireless providers 39<sup>th</sup> out of 40 telecommunications industries; only cable was worse.<sup>62</sup> In addition, despite a 15% reduction in complaints from 2002 to 2003, the wireless industry still was second in the number of complaints received by the Better Business Bureau; only auto dealers had more.<sup>63</sup>

If telephone companies were allowed to migrate their existing customers to a deregulated VoIP service, consumers would soon suffer a decline in service quality. The Commission must provide protections for VoIP customers, and not preclude state commissions from adopting their own consumer protections.

**A. The Commission Should Not Make It Possible for ILECs to Migrate Customers from Their Existing Networks to an Unregulated VoIP.**

The RBOCs either have or may soon have the capability to migrate their PSTN customers onto VoIP. Verizon, for example, has already begun replacing its traditional switches with VoIP equipment,<sup>64</sup> and as noted above has begun deployment of VoIP. SBC has announced plans to invest up to six billion dollars over five years in a broadband network capable of providing VoIP and other services.<sup>65</sup> RBOCs and other ILECs will be able to switch their customers from the regulated PSTN to an unregulated VoIP, without the customers' permission or knowledge.

If VoIP is deregulated, ILEC customers who are switched to an unregulated VoIP could lose many of the protections – such as price caps and anti-slamming/cramming

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<sup>62</sup> Simon, "Wireless services working on image," Columbus Dispatch (June 6, 2004) at G1.

<sup>63</sup> See "BBB Services Nationwide Surged in 2003; Businesses Ranked by Inquiries and Complaints," Better Business Bureau News Release (May 4, 2004) (available at <http://www.bbb.org/alerts/article.asp?ID=510>).

<sup>64</sup> See "Verizon Outlines Leadership Strategy for Broadband Era: Announces Major New 3G Mobile Data and Wireline IP Network Expansions," Verizon News Release (January 8, 2004).

<sup>65</sup> See "SBC to Push Fiber-Optic Network," Wall Street Journal (June 23, 2004) at B3.

rules – that this Commission and state regulation have provided them. Consumer protections enacted by state commissions – dealing with billing, installation, repair and disconnection – could also be discarded. The result could be poor service and less protection for consumers.

The ILECs argue for the need to deregulate IP services given the level of competition in this market. For example, Verizon broadly states “There is no need to impose economic regulation on any provider in this [VoIP and other IP-enabled services] competitive market.”<sup>66</sup> Although NASUCA does not advocate economic regulation for most VoIP services, dominant ILECs should not be able to avoid regulation simply because they change their network protocol to IP.<sup>67</sup>

As the Commission has defined “IP-enabled,” a wide range of services could be covered by any rule change geared toward IP services. The Commission explained in its *Notice* that “IP-enabled services” relate to “services and applications relying on the Internet Protocol family.”<sup>68</sup> The Commission explains that such broadly defined IP-enabled services “are typically provided over broadband facilities, but could ride on the narrowband facilities.”<sup>69</sup> Such IP-enabled services need not use the Internet. Thus, where an ILEC converts its existing network to IP, all of its services would transition to IP-enabled services under this definition. Given this definition and anticipating that the entire telecommunications industry transitions its networks to IP, in a few years the providers with the greatest IP-enabled market share may well be the ILECs.

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<sup>66</sup> Verizon Comments at 5.

<sup>67</sup> NASUCA Comments at 37-38.

<sup>68</sup> *Notice of Proposed Rulemaking*, FCC 04-28, 19 FCC Rcd 4863 (2004) (“*Notice*”), ¶ 1, n.1.

<sup>69</sup> *Id.*, ¶ 2, n.2.

The Commission should be cautious as it applies reduced regulation to IP-enabled services. Certainly, new competitors are offering IP-enabled services over consumers' broadband connections. However, ILECs will also transition their existing circuit switched networks to IP as well. As one observer recently noted,

By the end of the decade, the squat telephone circuit switching buildings first built by Ma Bell and found in communities around the country could become a relic of the past.

Verizon Communications said Wednesday it will begin by the middle of the year converting its massive nationwide network from a traditional circuit switch platform to a platform known as Voice Over Internet Protocol, or VoIP.

"We are literally taking what is known in the industry as the Public Switched Telephone Network and transforming it. The time is right for this move," said Paul Lacouture, vice president of Verizon's Network Services Group.

The new equipment would gradually replace the massive circuit switches in place now and could cause Verizon to close and sell off some of its central office facilities because the new equipment takes up far less space and could be housed in smaller "huts."<sup>70</sup>

In this manner and within a few years, Verizon will offer most of its existing services over an IP network. Consumers, without any action on their part, will have their basic local service transitioned to an IP-enabled service.

Simply because an ILEC changes the data protocol over which it offers local service does not justify changing the regulation for such service. Both services need consumer protections.

Beyond that, Verizon and Vonage are very different companies with vastly different market positions, even though both will be "IP" companies in the near future. Many ILECs will remain the dominant provider of local service in their region regardless

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<sup>70</sup> Pittsburgh Tribune-Review, "Verizon 'blazing a trail' as it updates gear," January 8, 2004.

of the protocols used to offer such service. Verizon continues to dominate the access lines served in its territory, as do most of the other large ILECs. The Commission's most recent Form 477, as of December 31, 2003, indicates that ILECs continue to dominate wireline telephone service. ILECs and competitive local exchange carriers ("CLECs") combined serve 181.4 million lines, while the CLECs serve only 29.6 million lines or 16.3% of that market.<sup>71</sup> Even when cable-telephony lines are added, all such wireline competitors serve only 17.7% of that market.<sup>72</sup> The Commission should not use VoIP as a pretext for deregulating ILECs such as Verizon, given the dominance that these ILECs continue to hold in this market.

Important differences remain concerning ILEC local service and broadband enabled IP services. Broadband-based IP service continues to have issues concerning 911 service, power backup, reliability, etc. Thus, the growth of broadband enabled IP service should not be considered as a reason for deregulating ILEC local services given the differences in these two markets.

Notably, the United States Telecom Association ("USTA") has recognized that simply because a service uses IP format does not mean that it should no longer qualify as a telecommunications service. USTA explains: "Some providers use IP as simply another form of transmission technology. They replace circuit switches with packet switches and provide the same service that they were otherwise offering."<sup>73</sup> In addition, USTA notes, "the use of packet-switched IP technology instead of circuit-switched

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<sup>71</sup> "Federal Communications Commission Releases Data on Local Telephone Competition," FCC News Release, June 18, 2004.

<sup>72</sup> *Id.*

<sup>73</sup> USTA Comments at 19.

technology does not change a telecommunications service into an information service.”<sup>74</sup> NASUCA agrees with USTA on these points<sup>75</sup> and emphasizes that simply changing a data protocol of an existing service should not trigger reclassifying a service and apply a new form of regulatory treatment.

In summary, the Commission should not allow massive deregulation of the ILECs’ existing services simply because such companies install new IP hardware and software and replace their circuit switched equipment. When a consumer picks up the telephone to use ILEC local service, it matters little to the consumer whether the data protocol of that service is IP or Time Division Multiplexing. The same concerns about market domination, universal service, public safety, and privacy would still apply. Simply because an ILEC changes its data protocol to IP should not eliminate all regulation of that ILEC’s services, including basic service.

**B. State Commissions Have Jurisdiction over Intrastate Uses of VoIP.**

The main argument against state jurisdiction is that VoIP is an information service, subject only to federal jurisdiction. That is addressed above.<sup>76</sup> The next argument is that even if VoIP is a telecommunications service, it should still be under exclusive federal jurisdiction. That is also addressed here.

In this section, NASUCA addresses various parties’ arguments against state jurisdiction, as opposed to arguments in favor of federal jurisdiction. For example, Pac-West Telecomm (“Pac-West”) trots out the tired “regulatory uncertainty” issue, which

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<sup>74</sup> *Id.* at 20.

<sup>75</sup> Though not on many others!

<sup>76</sup> See also BellSouth Comments at 32; Net2Phone Comments at 15.

state regulation has supposedly created.<sup>77</sup> To Pac-West, however, the only acceptable certainty would be federal preemption of state action. Effective state regulation as proposed by NASUCA would provide a different sort of certainty.

AT&T proposes that the Commission “identify conflicts between federal and state regulation with some particularity and make express preemption findings based upon the harm that state regulation would pose to federal policies.”<sup>78</sup> As seen here, this would be an exceedingly difficult task.

Some of the areas in which preemption is proposed to take place include economic regulation<sup>79</sup> or “traditional PSTN-type regulation.”<sup>80</sup> It does not appear, in fact, that any commenter has proposed that VoIP be subject to the full panoply of state economic regulation. Indeed, few RBOCs remain subject to traditional economic regulation. Specific state requirements complained against include tariffing<sup>81</sup> and certification requirements.<sup>82</sup> For example, AT&T states that “[e]fforts by states to regulate these services through state control over entry pose a particularly strong and unjustified impediment to the development of VoIP and other IP-enabled applications.”<sup>83</sup> AT&T does not explain how a state certification process would impede development of VoIP.

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<sup>77</sup> Pac-West Comments at 8.

<sup>78</sup> AT&T Comments at 43.

<sup>79</sup> *Id.* at 45; Time Warner, Inc. (“Time Warner”) Comments at 26; USTA Comments at 36.

<sup>80</sup> Charter Comments at 16; see also VON Coalition Comments at 23.

<sup>81</sup> Pac-West Comments at 9.

<sup>82</sup> As the Utah Division of Public Utilities (“Utah DPU”) points out (at 5), CLECs have to seek state certification. Why should VoIP providers avoid such a requirement?

<sup>83</sup> AT&T Comments at 45; see also VON Coalition Comments at 22.

AT&T also states that “subjecting IP-enabled applications to potentially open-ended state regulation designed for traditional services would impose unjustified regulatory burdens on these services....”<sup>84</sup> Such sweeping statements are not very helpful; “unjustified” is in the eye of the beholder. As the PUCO notes, barriers to entry are barred by 47 U.S.C. § 253(a), but § 253(b) protects the states’ ability to regulate universal service, public safety, service quality and consumer rights.<sup>85</sup>

8x8, Inc. describes “the scope of possible regulation” by citing an incumbent’s position in the New York proceeding.<sup>86</sup> But 8x8 conveniently overlooks the New York Public Service Commission’s (“NYPSC’s”) actual ruling, which allowed Vonage to apply for waiver of any provision of New York law or regulation it finds burdensome.<sup>87</sup>

In an extreme position, Verizon states, “*any* obligations imposed on IP-enabled services by the states would be a burden in light of the federal commitment to deregulation of the Internet and other interactive computer services.”<sup>88</sup> This position in fact assumes – as refuted above – that VoIP *is* the Internet or an interactive computer service.<sup>89</sup> The same view is behind EFF’s proposal that the Commission should “extend” its holding in *Pulver*,<sup>90</sup> despite the Commission’s determination in *Pulver* that its finding was limited to the particular circumstances there. CompTel/ASCENT explode the

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<sup>84</sup> AT&T Comments at 45; see also Net2Phone Comments at 17.

<sup>85</sup> PUCO Comments at 22; see also NARUC Comments at 11. The Iowa Utilities Board discusses (at 3) the general provisions of the 1996 Act that leave jurisdiction to the states.

<sup>86</sup> 8x8 Comments at 14.

<sup>87</sup> See NYPSC Comments at 3-4.

<sup>88</sup> Verizon Comments at 41 (emphasis in original), footnote omitted citing *Pulver Order*, ¶ 19 n. 70. It should be noted that the citation is not helpful, given the Commission’s finding that FWD is a service that never touches the PSTN. See also Pac-West Comments at 9-10.

<sup>89</sup> See also SBC Comments at 47.

<sup>90</sup> EFF Comments at 6; see also 8x8 Comments at 10; Cablevision Comments at 11.

Commission's decision in *Pulver* to preempt state regulation for FWD into a mandate that there be preemption of state action "for all IP-enabled applications."<sup>91</sup>

The VPSB puts the issue into perspective:

State regulation may in fact impose only minimal burdens on IP-enabled service, burdens that are commensurate with [those placed on] other providers who provide functionally similar services. Moreover, divergent approaches are not only allowed under the Constitution, but are often recognized as the preferred way of developing the best new policies.<sup>92</sup>

AT&T asserts that the Commission should make "specific findings for these services that reaffirm and extend the application of the *Computer Inquiries*' conclusions, which preempted states from applying 'common carrier tariff regulation' and 'public-utility type regulation' to information services, to IP-enabled applications."<sup>93</sup> This again assumes that VoIP has more in common with information services than with traditional voice services.<sup>94</sup> Nothing in AT&T's comments shows the commonality of VoIP with the information services addressed in the *Computer Inquiries*.

The same philosophy is inherent in the theme that state regulation "would affirmatively discourage innovation and investment by imposing burdensome costs on providers."<sup>95</sup> Innovation and investment are not to be valued *per se*; they must remain subservient to the public interest. State regulation ensures that the service remains within the sphere of the public interest. The NYPSC notes that "[s]tates' interests in

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<sup>91</sup> CompTel/ASCENT Comments at 4; see also Global Crossing Comments at 7; Level 3 Comments at 17; Qwest Comments at 28.

<sup>92</sup> VPSB Comments at 28; see also VSCC Comments at 9.

<sup>93</sup> AT&T Comments at 46-47; see also Covad Comments at 19, Verizon Comments at 40.

<sup>94</sup> See CTIA Comments at 6; CompTel/ASCENT Comments at 5; Motorola Comments at 4.

<sup>95</sup> SBC Comments at 45; see also BellSouth Comments at 3; PointOne Comments at 11.



maintaining capable, robust, and efficient telecommunications networks are self-evident.”<sup>96</sup>

The so-called Federation for Economically Rational Utility Policy (“FERUP”) asks us to contrast California and Florida.<sup>97</sup> In California, the state commission was quick to assert its jurisdiction; in Florida, the legislature was quick to deny jurisdiction to its commission. Yet what this “economically rational” group of state commissioners does not do is show that VoIP providers are materially less active in California – or Minnesota, or New York, or any of the other states that have asserted jurisdiction – than in Florida.

As a key basis to prevent any state regulation, the industry argues that “IP-enabled services are divorced from geographic location...”<sup>98</sup> and that they are “inherently nomadic in nature.”<sup>99</sup> Of course, this ignores the cable-based and ILEC-proposed VoIP telephony that is and will be, in fact, tied to a specific location.

It may be that an end-to-end analysis is difficult for VoIP. However, NASUCA takes it for granted that a call from a phone with a number from the Columbus, Ohio area code to a phone with a number from the Columbus, Ohio area code is an intrastate call.<sup>100</sup> An analogy to wireless is appropriate: When a CMRS phone with a Columbus, Ohio number is taken to Denver, and a call is made to a customer located in Columbus, that is

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<sup>96</sup> NYPSC Comments at 2.

<sup>97</sup> FERUP Comments at 8.

<sup>98</sup> Verizon Comments at 40; VON Coalition Comments at 21.

<sup>99</sup> AT&T Comments at 46.

<sup>100</sup> See National Consumers League (“NCL”) Comments at 7.

admittedly an interstate call.<sup>101</sup> But when the same cell phone returns to Columbus and calls the other Columbus number, that is an *intrastate* call.<sup>102</sup>

It may be that “for many Internet applications, it is impossible to determine where transmissions ultimately terminate.”<sup>103</sup> But it is also true that for *other* IP-enabled services, such as VoIP, it is often certain where the transmissions terminate.<sup>104</sup> PointOne acknowledges that “if it were possible to segregate traffic based on originating or terminating end points, it would only be done for end user comfort, marketing reasons, or to meet some ill-conceived regulatory mandate....”<sup>105</sup> This does not sound difficult, much less impossible.<sup>106</sup>

CPUC provides some perspective on the true end-to-end nature of the calling that takes place over VoIP:

[M]any providers of voice-grade telephony over IP advertise their service to the public as a replacement for conventional voice telephone service. It is therefore reasonable to assume that the calling patterns for most residential customers using voice over IP service will be substantially similar to their calling patterns using conventional telephone service offered by local exchange carriers and wireless carriers. Currently, about 78 percent of traditional voice telephone calls provided by local exchange carriers is intrastate in nature.... The percentage breakdown for voice

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<sup>101</sup> Vonage’s touting (at 17) of a “future” service that will allow its customers to make use of WiFi networks only underscores the analogy to wireless service.

<sup>102</sup> CTIA’s statement (at 4) that “[b]oth Congress and the FCC ... concluded that [wireless] services should be regulated at the federal level” ignores the substantial residual regulatory authority that states have over, e.g., wireless service quality.

<sup>103</sup> Telecommunications Industry Association Comments at 7; see also CTIA Comments at 3; Level 3 Comments at 13; MCI Comments at 23.

<sup>104</sup> See Missouri Public Service Commission Comments at 9.

<sup>105</sup> PointOne Comments at 12.

<sup>106</sup> The Minnesota Public Utilities Commission (at 12) correctly points out that the Commission’s number portability guidelines usually would not permit a VoIP provider to allow its customers to use numbers not normally associated with the customer’s physical location.

telephony calls provided by wireless carriers is 83 percent intrastate....<sup>107</sup>

The carriers often engage in all-or-nothing postulation. For example, SBC speculates that state 911 regulation “could in some cases conflict with federal policy in this area.”<sup>108</sup> The mere possibility of conflict between federal and state regulation is no grounds to forbid all state regulation.<sup>109</sup>

Vonage and Comcast make some extreme arguments concerning the role of state regulation. Vonage asserts that one of the primary motivations behind the assertion of state jurisdiction by any party “is to preserve the advantages, and revenues, of monopoly incumbent local exchange carriers.”<sup>110</sup> Comcast says “that there is virtually no limit to the imaginations of those who are dreaming up ways in which new services should be regulated – purportedly for the benefit of the public but in truth in the narrow interests of proponents.”<sup>111</sup> These aspersions are being cast at state regulators – who have done much to open local markets to competition, thereby putting the revenues of the monopoly ILECs at risk – and at state consumer advocates who are not really known as friends of the incumbents. This charge shows these commenters’ desperation to avoid the key role of state regulators and consumer advocates in protecting consumers. Notably, as

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<sup>107</sup> CPUC Comments at 34-35 (citing 2004 FCC Telecommunications Industry Revenue Report) (footnotes omitted).

<sup>108</sup> SBC Comments at 43.

<sup>109</sup> See Covad Comments at 18.

<sup>110</sup> Vonage Comments at 14.

<sup>111</sup> Comcast Comments at 10.

discussed above, many of the incumbents themselves are opposed to state regulation.<sup>112</sup>

In fact, BellSouth says that the Commission should preempt all state regulation.<sup>113</sup>

Pac-West states that “state regulation cannot be confined in any principled way to VOIP-based services alone...”<sup>114</sup> Again, the extremism of this statement is countered by the four-part test proposed by the National Cable & Telecommunications Association (“NCTA”), which would allow limited state regulation of VoIP-based services that were sold as a substitute for traditional telephone service.<sup>115</sup>

ICORE presents the central rationale for allowing state regulation of VoIP services:

To the extent that VoIP providers ... hold themselves out as a total replacement for traditional ILEC or CLEC services, states also must be given jurisdiction. That is, if the VoIP provider claims to be a replacement for local exchange services, it should be held to the same functional equivalency, substitutability, and use of facilities tests as VoIP toll services.

If, in fact, it is determined that the VoIP carrier is offering – or attempting to offer – local exchange services in direct competition with existing ILECs or CLECs, it must be held to the same state regulatory standards. Otherwise, customers lured by a new technology and cheaper rates will end up with inferior service.<sup>116</sup>

Charter concedes a state role in regulation of VoIP, although its focus is on “policing the relationship between VoIP providers and existing PSTN entities...”<sup>117</sup> Cox

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<sup>112</sup> See, e.g., Qwest Comments at 28-36.

<sup>113</sup> BellSouth at 58; see also CompTel/ASCENT at 4.

<sup>114</sup> Pac-West Comments at 10.

<sup>115</sup> See NCTA Comments at 9, 41. NASUCA does not necessarily support the specifics of the NCTA test; the point is that such “principled” distinctions can in fact be drawn.

<sup>116</sup> ICORE Comments at 7-8.

<sup>117</sup> Charter Comments at 16; see also Covad Comments at 18; NCTA Comments at 41; PUCO Comments at 18.

addresses the administrative nightmare that would occur if the Commission attempted to address all intercarrier complaints relating to VoIP.<sup>118</sup> The same conditions would apply if the Commission took jurisdiction over all retail VoIP complaints.<sup>119</sup>

Apparently, VoIP providers are willing to suffer from a patchwork of state rulings on interconnection policy,<sup>120</sup> but not of consumer protection. Cox states that “[t]he solution ... is to maintain a state role in dispute resolution and enforcement to the maximum extent possible.”<sup>121</sup>

SBC concedes that “[a] generally applicable state consumer protection requirement may not conflict with the Commission’s unregulatory approach....”<sup>122</sup> And even Qwest, which defines “an urgent need for a Commission statement preempting all state regulation of IP-enabled services and applications, including but not limited to IP voice offerings”<sup>123</sup> nonetheless would allow “state laws and regulation (e.g., consumer protection) of general applicability.”<sup>124</sup>

Time Warner would be more restrictive:

[A]lthough some regulation of terms and conditions may be unobjectionable, many existing state rules that at first glance may appear to be harmless “consumer protection” in fact antedate the advent of competition and in substance constitute “regulations

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<sup>118</sup> Cox Comments at 14-15.

<sup>119</sup> Cox refers to its experiences with Commission-handled carrier disputes (*id.* at 15); equally, the Commission’s track record of processing slamming complaints does not bode well for consumer disputes.

<sup>120</sup> See Level 3 Comments at 15.

<sup>121</sup> Cox Comments at 15.

<sup>122</sup> SBC Comments at 44; see also NCTA Comments at 41; VON Coalition Comments at 23.

<sup>123</sup> Qwest Comments at 30.

<sup>124</sup> *Id.* at 34. Even this allowance would be subject to preemption on a case-by-case basis. *Id.*, n.117. The Consumer Electronics Association, which represents firms that manufacture electronic equipment, says (at 7) that “traditional consumer protections” must apply to VoIP, without conceding that such protections come from state law and are governed by state courts, attorneys general and regulatory commissions.

designed to respond to the dominance of centralized, monopoly-owned networks[.]”<sup>125</sup>

Yet the consumer protections that Time Warner cites – requirements for deferred payment plans; rules allocating payment first to local service and requiring provision of “local only” service; and service quality rules<sup>126</sup> – are clearly not just the product of a monopoly environment. Rather, they reflect the public interest in maintaining basic local telephone service, an interest that exists regardless of the level of competition.

Despite Vonage’s fervent arguments for federal preemption, it does admit the possibility that “the Commission may determine that it is appropriate to delegate certain functions to state public utility commissions to administer the national regulatory framework....”<sup>127</sup> Vonage particularly refers to CPE rules for persons with disabilities.<sup>128</sup> Yet Vonage also cites other examples of state regulation that do not result from federal delegation, e.g., Internet-related privacy regulations and e-mail regulation.<sup>129</sup> And finally, Vonage appears to admit that state laws concerning consumer protection would be enforceable against VoIP providers.<sup>130</sup> TXAG describes the scope of these state laws.<sup>131</sup>

As the Maine Public Utilities Commission states,

A scheme which allows states to do what they do well, such as consumer protection, service quality and handling customer complaints, but also allows the FCC to determine national policy

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<sup>125</sup> Time Warner Comments at 26-27, quoting *Notice*, ¶ 36.

<sup>126</sup> *Id.* at 27, n.86.

<sup>127</sup> Vonage Comments at 22.

<sup>128</sup> *Id.* at 22-23. See below for more discussion of the need to adapt VoIP for persons with disabilities.

<sup>129</sup> *Id.* at 23. Vonage appears to miss the point that these state regulations of what are acknowledged to be enhanced services have not stifled the growth of the Internet.

<sup>130</sup> *Id.*

<sup>131</sup> TXAG at 16-18.

issues in a partnership with the states may be a desirable outcome.<sup>132</sup>

Generalizing a statement by the PUCO, states “need to retain [their] authority to consider minimal regulations that address basic retail issues presented by the impending proliferation of VoIP services.”<sup>133</sup> As shown in NASUCA’s initial comments and these reply comments, NASUCA proposes that states be allowed to regulate VoIP in the ways in which states do well.<sup>134</sup>

As stated by AARP:

Residential consumers have come to rely on these state regulations to ensure that they receive reliable and high quality telephone service and that they have appropriate consumer protections. ... Just as residential consumers expect these protections for traditional telephone service, these protections should cover similar VoIP services as well.<sup>135</sup>

The NGA summarizes the reasons that states “have a role in promoting as well as regulating the communications industry in the future....”<sup>136</sup> That role should also apply to the present, as it pertains to VoIP.

In conclusion, USTA crystallizes, perhaps unwittingly, the key issue here, stating that “[d]espite the abundant benefits of allowing competition to flourish in the fast-growing IP-enabled services market without the drag of unnecessary regulation, state commissions around the country have already indicated their desire to impose regulatory

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<sup>132</sup> Maine Commission Comments at 5; see also Cox Comments at 16; NCL Comments at 7; PUCO Comments at 6.

<sup>133</sup> PUCO Comments at 19.

<sup>134</sup> The state regulators who are the members of FERUP disclaim any state role in regulating VoIP (at 7), but do so for the reasons refuted herein. *Id.* at 6-9.

<sup>135</sup> AARP Comments at 2.

<sup>136</sup> NGA Comments at 2, 7.

burdens on IP providers.”<sup>137</sup> USTA assumes, in essence, that any regulation is unnecessary and burdensome, and that the benefits of IP-enabled services will diminish or disappear in the face of such regulation. NASUCA submits that an appropriate balance between competition and regulation can be struck in any industry, as it has been in many industries and can be with regard to VoIP. The Commission must participate in the “cooperative federalism” cited by the CPUC,<sup>138</sup> rather than assuming the paternalistic preemptive role pressed by much of the industry.

**V. NASUCA SUPPORTS THE OPPORTUNITY FOR ALL CONSUMERS TO HAVE VOIP ACCESS OVER THEIR BROADBAND CONNECTIONS.**

Many VoIP providers reject the idea of regulating their VoIP consumer services. However, the same companies strongly endorse the idea that regulators should guarantee that VoIP providers have access to the broadband connections that their services depend upon. For example, pulver.com states, “The Commission must ensure that an access obligation prevails that allows [Application Service Providers] to deliver their innovative services and applications to consumers.”<sup>139</sup> Vonage endorses “Net Neutrality” as requiring the “openness” of the Internet.<sup>140</sup> AT&T endorses “regulations that ensure that retail customers of the broadband transmission and ISP services of any provider should be free to access any web site for any purpose of the customer’s choosing – including to access other providers of VoIP and other IP-enabled application platforms – without

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<sup>137</sup> USTA Comments at 34.

<sup>138</sup> CPUC Comments at 31.

<sup>139</sup> pulver.com Comments at 27.

<sup>140</sup> Vonage Comments at 9.



interference or other influence of the broadband services provider.”<sup>141</sup> Many of the carriers would have this regulation take place at the state level.

NASUCA supports the proposals that consumers should have access to all VoIP providers over their broadband connections. The openness of the Internet is an important requirement. Consumers should have the opportunity to choose from many different competing telecommunications services – including those that they can use over their broadband access to the Internet. Such open access requirements are essential in order to make certain that consumers can benefit from all of the different forms of VoIP competition. Even with such open access, however, consumer protection must still be accomplished by regulation.

## **VI. ACCESS TO AND FUNDING FOR E911 BY VOIP SERVICES MUST BE ASSURED.**

The comments overwhelmingly support the necessity for all consumers, including those being served by VoIP providers, to access emergency services by dialing 911 with their call-back number and location information transmitted to the appropriate Public Safety Answering Point (“PSAP”). Level 3 states, “Universal access to emergency services by communications end users is a fundamental public policy goal.... [T]he overriding social benefit of ubiquitous access to emergency services across differing communications platforms requires government to mandate that end users have access to emergency facilities.”<sup>142</sup>

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<sup>141</sup> AT&T Comments at 53.

<sup>142</sup> Level 3 Comments at 36.

In its *Notice*, the Commission asked how it should weigh the benefits of requiring emergency calling and other public safety capabilities against the risk that regulation could slow VoIP development. The City and County of San Francisco said this should not be a tough decision: “Without VoIP, people may lack access to flexible telephone features; without access to 911 services, people may lack access to life-saving equipment and personnel.”<sup>143</sup> NASUCA agrees; NASUCA’s comments emphasized that public safety, homeland security, and citizens’ lives and property must be paramount.

While there is nearly unanimous support for providing E911 access, there is disagreement about the appropriate public policy approach for achieving it. Some, such as the National Telecommunications Cooperative Association (“NTCA”), favor a regulatory requirement to provide E911,<sup>144</sup> and others, like Vonage, argue for cooperative voluntary industry efforts to achieve this goal.<sup>145</sup> Generally, consumer organizations, local governments, emergency service providers and state public utility commissions support Commission-mandated access to E911 for VoIP customers.<sup>146</sup>

The technical feasibility of VoIP to provide full E911 capability varies by the IP flavor employed by the provider. Verizon ignores the facts when it overstates the case and says that the industry unanimously agrees that “it is not possible to offer E911 services to VoIP customers.”<sup>147</sup> A number of cable companies, like Time Warner, and

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<sup>143</sup> San Francisco at 8.

<sup>144</sup> NTCA Comments at 15-16; see also USTA Comments at 39-40; Valor and Iowa Telecommunications Comments at 12.

<sup>145</sup> Vonage Comments at 38

<sup>146</sup> Even FERUP would not leave the provision of functionally equivalent E911 service solely to the market to address because “the societal importance and public safety implications are too great to be overlooked in the meantime.” FERUP Comments at 14.

<sup>147</sup> Verizon Comments at 53.

other VoIP providers, such as ICG and Cbeyond, provide E911 to their customers now, however.

NASUCA's comments urged the Commission to first require that VoIP providers deliver E911 calls to the existing 911 networks and then allow time for the industry and public safety community to develop the IP 911 solutions. The comments submitted in this docket demonstrate that this is sound policy.

Finally, NASUCA cautioned the Commission to take no action that would prevent continued state and local funding for 911. Again, those who commented on this issue stressed the importance of this funding and the threat to the continued existence of 911 if such funding were reduced.

**A. E911 Must Be Mandatory for VoIP Services.**

As NASUCA pointed out in its initial comments, voluntary efforts will not ensure the universal availability of E911 over VoIP service, either on an interim or permanent basis.<sup>148</sup> Mandatory requirements are necessary to spur deployment of E911 capability and to expedite technological solutions to E911 for certain mobile or nomadic VoIP applications.<sup>149</sup> Fixed location VoIP providers should provide full E911 capability now. For providers of nomadic services, the Commission should establish a deadline of March

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<sup>148</sup> NASUCA Comments at 51. Frontier and Citizens Telephone Companies (at 3-4) agree, and caution the Commission to "not trust all VoIP providers to solve [these] problems on a voluntary basis." The ACC (at 15) acknowledges the industry's efforts to resolve 911 issues; however, it believes that the ability of a VoIP customer to make a 911/E911 call is such an important public safety issue that its availability should not solely be based on good intentions and voluntary effort by service providers. See also NCL Comments at 4; CWA Comments at 22.

<sup>149</sup> See also The New Jersey Division of the Ratepayer Advocate ("NJDR") Comments at 21 ("there is an immediate need for the Commission to adopt mandatory requirements that VoIP providers offer 911/E911 to all of their customers") and 24 ("The Commission simply cannot rely on the non-binding nature of these voluntary agreements to spur deployment of IP-enabled E911 services").

31, 2005 for routing 911 calls over the existing 911 networks to the appropriate public safety access point with callback and location information.

From the introduction of VoIP service, NASUCA has been troubled by the views of various stakeholders regarding providing 911/E911 services over VoIP. The initial comments filed in this proceeding have only heightened NASUCA's concerns.

Alarming, one IP-provider – nexVortex – claims that it currently blocks calls to 911.<sup>150</sup> However, nexVortex may be somewhat confused since it apparently believes that 911 is a pay-per-call service.<sup>151</sup> In any event, having even one VoIP provider believing that it does not have to comply with the Commission's rules and state laws, especially on the provision of 911 service, is one carrier too many.<sup>152</sup>

Other carriers' positions are just as disconcerting:

- ▶ Vonage claims that the need for VoIP 911/E911 regulation may be partially or wholly abrogated since "VoIP providers will strive to offer the best 911 service possible to respond to competitive market forces."<sup>153</sup>
- ▶ MCI states that the market itself will lead providers of IP-based voice applications to offer emergency services to their customers while the standards setting process is underway and that establishing E911 mandates

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<sup>150</sup> nexVortex Comments at 4.

<sup>151</sup> *Id.*

<sup>152</sup> If a customer of a nomadic or non-geographic VoIP service does not "activate" their access to 911 the effect would be the same as if that call had been blocked. This violates not only the public interest but more importantly the safety of that consumer is put in serious peril. See also NYAG Comments at 6; NCL Comments at 4 ("[911] is too vital a service to make dependant on provisions described in small print on lengthy contracts that few consumers read or understand"); CWA Comments at 20.

<sup>153</sup> Vonage Comments at 37.

before technical solutions are agreed upon and visible will only cause unnecessary expense, confusion and regulatory uncertainty.<sup>154</sup>

- ▶ AT&T states that it and other industry members are “working hard to develop more comprehensive [911] solutions.”<sup>155</sup>
- ▶ Verizon agrees that basic 911 should be provided but is content to wait for E911 until the industry develops and phases in “technically practicable” standards.<sup>156</sup>
- ▶ Pulver.com states that “most of [these] issues will be resolved as a matter of course by market forces.”<sup>157</sup>
- ▶ Net2Phone asserts that the current 911 system is a reason why the Commission should continue its support of voluntary industry efforts to develop a workable 911 solution.<sup>158</sup>

These companies’ disregard for the well-being of consumers is appalling. A VoIP user whose spouse is having a heart attack at 3:00 in the morning should not be required to wait until IP-based voice applications for E911 become “visible,” or until the

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<sup>154</sup> MCI Comments at 38.

<sup>155</sup> AT&T Comments at 31; VON Coalition (at 10), MCI (at 38-39) and AT&T (at 31) describe the “far richer suite of emergency services” that may eventually be provided over VoIP. However, consumer’s safety must not be put at risk while the industry researches, develops, tests and finally implements such a suite of services. Indeed, AT&T admits that in order for this suite of services to become reality (or using MCI’s verbiage “visible”) a number of “substantial obstacles” must be overcome and that this will take “time.” Verizon (at 52) also admits that there are “difficult technical issues that will take some time to resolve.” Vonage (at 38) states that the VoIP industry should be allowed time and flexibility to develop and deploy industry technical standards.

<sup>156</sup> Verizon Comments at 51. Verizon makes a major but unfounded assumption in its description of basic 911 – that the caller can respond to queries by the 911 operator. This is one key factor why the Commission should mandate access to E911 since in the event the caller cannot provide the “relevant customer information” the call to basic 911 is practically useless.

<sup>157</sup> pulver.com Comments at 46.

<sup>158</sup> Net2Phone Comments at 22-23.

marketplace takes care of the issue. In fact, it is the invisible dependability of E911 service that consumers rely on. Even the youngest child is taught how to use 911. Youngsters who cannot put complete sentences together (or provide “relevant customer information” as Verizon states) are instructed on how to use 911.

As NJDRA states, “After all, the Commission should not tolerate the possibility that the inability to reach an emergency service provider over an IP line could lead to death or serious injury.”<sup>159</sup> AARP correctly points out that “the ability to pinpoint the location of 911 calls is critical because it enables almost immediate dispatch of emergency aid, even when the caller is too injured or disoriented to provide his or her exact location. Consumers have come to expect enhanced 911 on any traditional telephone they pick up.”<sup>160</sup> The ACC states that the potential consequences from the unavailability of 911 services are simply too great to be overlooked or minimized just because a new technology is emerging.<sup>161</sup>

AT&T’s comparison of VoIP services to wireless services in the early 1990s as justification for granting a reasonable transition time to allow the industry to develop a technically feasible means of providing E911 is unconvincing.<sup>162</sup> Most VoIP services are being marketed as a replacement for landline telephone service. In the early 1990s wireless service users were not replacing but supplementing their landline service. Thus their expectations for their wireless and landline services were different. In addition, it is

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<sup>159</sup> NJDRA Comments at 24-25.

<sup>160</sup> AARP Comments at 2. APCO (at 8) notes that in a residential setting, the person attempting to make the 911 call could be a child of an injured parent or caretaker, a neighbor unfamiliar with the limitations of the homeowner’s VoIP telephone, or even the original purchaser who, in the heat of an emergency, forgets the 911 disclaimer that they may or may not have read when acquiring the VoIP service.

<sup>161</sup> ACC Comments at 14.

<sup>162</sup> AT&T Comments at 33, n. 20.

debatable whether the time period granted wireless carriers was in the public interest, given that many consumers had to use the “unenhanced” version of 911 that was allowed.

The real lesson of wireless E911 is that Commission-imposed deadlines are essential to achieving E911. Had the wireless industry been left to its own devices and timetable, wireless E911 would likely be no more a reality now than it was ten years ago.

USTA almost gets it right when it states that public safety requires that United States citizens have access to 911/E911 services.<sup>163</sup> Yet USTA recommends that the Commission require basic 911 service but not implement the requirements until the industry develops an E911 solution.<sup>164</sup> USTA also erroneously assumes that E911 is not technically feasible today; E911 *is* technically feasible for many VoIP providers.

In fact, some VoIP providers agree that VoIP services should be subject to 911/E911 requirements.<sup>165</sup> CenturyTel correctly asserts that consumers who switch to IP-enabled telephone service must not find themselves stripped of the public safety capabilities and consumer protections now available from their “phone company.”<sup>166</sup>

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<sup>163</sup> USTA Comments at 39.

<sup>164</sup> *Id.* at 41.

<sup>165</sup> See e.g., Time Warner Comments at 13; Comcast Comments at Appendix A, page 4; CenturyTel Comments at 23-24; Frontier and Citizens Comments at 3-4.

<sup>166</sup> CenturyTel Comments at 24; see also Telecommunications for the Deaf Comments at 9; VSCC Comments at 17-18; NCL Comments at 4; King County (Seattle) E911 Program (“King County E911”) Comments at 2, 5, 11; David E. Magnenat Jr. Comments (if VoIP service does not completely replace traditional service, VoIP providers are being less than truthful with consumers who expect to call 911); APCO Comments at 4 (public has come to expect that their telephone will provide immediate access to emergency services by dialing 911); CWA Comments at 20.

NASUCA also agrees with the Department of Justice that

[t]he Commission should continue to recognize that the public interest includes public safety ... these interests must not be subordinated to business and economic interests. In fact, in considering business and economic interests, the Commission should recognize that advancing the interests of public safety ... makes for a more secure and stable business environment – the very type of environment that fosters creative innovation and a competitive market economy.<sup>167</sup>

The Citizens Utility Board (“CUB”) states, “Ubiquitous access to emergency response services is far too critical to leave to the vagaries of the marketplace.”<sup>168</sup> OPASTCO agrees that consumers have a right to expect E911 functionality from all service providers that offer functional equivalence to traditional telephony.<sup>169</sup> The ACC also recognizes that the public has come to expect that, during an emergency, dialing 911 from a phone will allow the caller to reach a PSAP and thus, the ubiquity of 911 service must not be compromised.<sup>170</sup> APCO states that 911 callers view all telephones as functionally equivalent and expect that the level of 911 service will be the same.<sup>171</sup>

The State of Utah requires all telecommunication providers to provide either 911/E911 service or interconnect with the local exchange provider to provide the

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<sup>167</sup> Department of Justice Comments at 12.

<sup>168</sup> CUB Comments at 28.

<sup>169</sup> OPASTCO Comments at 7.

<sup>170</sup> ACC Comments at 13-14; see also NYAG Comments at 5-6; Utah DPU Comments at 8; Minnesota Public Utilities Commission Comments at 12 (the FCC should prohibit the provisioning of VOIP services without E911 accessibility); King County E911 Comments at 2, 5; Boulder Regional Emergency Telephone Service Authority (“BRETSA”) Comments at 1, 4-6.

<sup>171</sup> APCO Comments at 4.



service.<sup>172</sup> In its comments, the Utah DPU states that every provider in Utah complies with this directive, even providers who have few subscribers and limited budgets.<sup>173</sup>

These issues are too important to be left to the industry or to the marketplace. The Commission should require that all consumers retain the ability to access E911 service no matter which technology provides their voice communications.

**B. VoIP E911 Is Technically Feasible for Certain Applications.**

NASUCA continues to support Commission requirements to implement immediate solutions that deliver 911 calls to the existing 911 networks from VoIP callers. An IP-based emergency access protocol will take time to develop and, if using the public Internet, could take years. The public Internet is currently a hostile environment in which to route 911 calls directly to PSAPs. This is the same Internet that is plagued by worms, viruses, spam, hacking and other afflictions. E911 calls require security, reliability, and quality to be responded to efficiently by 911 call-takers. A 911 call of poor quality with missing words due to packet delivery delays will be difficult or impossible to respond to and thereby delay emergency response time.<sup>174</sup> Security concerns must be addressed before there is any reliance on the public Internet to deliver emergency calls. And, the public has come to expect reliability in the 911 system. The public must be assured that 911 calls via IP-based emergency access will be delivered to the correct PSAP with accurate call-back and location information as reliably as E911 calls over legacy networks today and such assurances must be provided before it is deployed.

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<sup>172</sup> Utah DPU Comments at 8.

<sup>173</sup> *Id.*

<sup>174</sup> See Utah DPU Comments at 6 for a discussion of bad Internet connections affecting the quality of the voice transmission – an even more serious problem with a 911 call.

MCI and AT&T tout the potential benefits of 911 based on IP technology, including the ability to reach 911 emergency services from peripheral devices like Blackberries, the ability to provide additional data to emergency responders, conference in medical personnel, and contact family members.<sup>175</sup> Public safety today requires the simple ability to deliver E911 calls to the correct PSAP by VoIP providers; when this is achieved, the potential benefits of enhanced features for VoIP 911 can then be addressed.

Fixed location VoIP providers should provide and be required to provide E911 capability today. Cable companies such as Cox can provide E911 access “because it maintains complete control of its end-to-end managed network infrastructure and back-office functions.”<sup>176</sup> Other fixed location applications associate the telephone number with the specific geographic service location, just as wireline telephones do, thus enabling E911. NASUCA questions why even mobile or nomadic VoIP services could not offer the same E911 functionality when the customer is using it from the service location address. It is likely that in most cases, consumers will use their VoIP service to dial 911 from their residence or business service location, rather than from a hotel, airport, neighbor’s residence or other location; they are more likely to use the phone located there for emergency purposes. Moreover, the terminal adapters consumers must transport and hook up to a broadband connection are mobile, not portable; they are not easily disconnected, transported, and reconnected.<sup>177</sup>

E911 capability for mobile or nomadic VoIP services when transported to a location other than the service address may be close to a solution in which the existing

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<sup>175</sup> AT&T Comments at 31; MCI Comments at 38-39.

<sup>176</sup> Cox Comments at Exhibit 1, p. 2.

<sup>177</sup> See CPUC Comments at 36-37.

911 networks and wireless Phase 2 functionality are used. Nortel Networks presented such a solution to the National Emergency Number Administration's ("NENA's") March 16, 2004 Technical Development Conference.<sup>178</sup> The solution, described in full in Nortel's Appendix to its comments, uses the wireless 911 infrastructure together with "interfaces and new functionality" required by VoIP to properly route a 911 call "and the ability of the PSAP to retrieve near real-time location updates. This allows full E911 functionality to be quickly introduced for VoIP while minimizing the capital outlay required by the PSAP."<sup>179</sup> This is a solution that interfaces with the existing 911 networks to route the calls to the PSAP with automatic number identification and automatic location identification, without requiring PSAPs to use already scarce resources to upgrade their equipment so soon after the upgrades necessary to implement wireless Phase 2 capability.

NASUCA suggests that the Commission expeditiously pursue solutions like the one offered by Nortel that use the existing 911 networks to provide E911 from VoIP services, while permitting the industry, Intrado, NENA, APCO and others to pursue IP-based emergency access protocols over a longer time horizon. In this way, consumers needing to use 911 are not put at risk. NASUCA further recommends that the Commission mandate E911 for VoIP services as soon as possible so that public safety and homeland security are protected.

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<sup>178</sup> Nortel Comments at 10-11.

<sup>179</sup> *Id.* at 13.

**C. Funding for E911 Must Be Supported by VoIP Services.**

VoIP providers must collect and remit state and local 911 surcharges, the funding mechanism used by almost all states to equip and operate their PSAPs. Because some VoIP providers, such as Vonage, are not now collecting the 911 surcharge, a requirement must be imposed to ensure a level playing field and to continue adequate support for 911. Moreover, if VoIP replaces wireline service as predicted, wireline surcharges will erode and there will be no replacement surcharge dollars from VoIP.<sup>180</sup> King County E911 states, “This situation must be corrected quickly before the E911 systems suffer irreparable harm and E911 service throughout the nation is degraded.”<sup>181</sup> The New York Attorney General observes, “As the number of customers switching to VoIP telephony increases, the funding level of these vital facilities will be jeopardized if these customers are allowed to avoid contributing and the burden of these costs will shift disproportionately and unfairly to wireline and wireless consumers.”<sup>182</sup>

NENA, while supporting national direction to 911, comments that state and local governments should not be preempted from allocating the financial obligations among providers offering 911 capability.<sup>183</sup> The NCTA recommends that those VoIP services meeting its four-prong test (the service provider uses NANP and the PSTN, the service is a possible replacement for POTS, and it uses IP transmission between service provider

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<sup>180</sup> See Texas Commission on State Emergency Communications Comments at 4.

<sup>181</sup> King County E911 Comments at 4; see also San Francisco Comments at 9.

<sup>182</sup> NYAG Comments at 6; see also VSCC Comments at 18.

<sup>183</sup> NENA Comments at 8; see also Nebraska Public Service Commission Comments at 9-10.

and customer, including use of an IP terminal adapter or phone) should collect and remit funding for 911.<sup>184</sup>

APCO argues that all telephone customers who can connect to 911, including through VoIP, should pay their fair share of the cost.<sup>185</sup> “While such fees are beyond the FCC’s jurisdiction, we urge the Commission to refrain from pre-empting states from requiring that VoIP customers pay 9-1-1 fees.”<sup>186</sup> BRETSA notes that VoIP providers would have an unfair competitive advantage if they did not have to provide E911 capability and their customers did not have to pay the surcharge.<sup>187</sup>

The comments clearly support the ability and authority of state and local governments, without federal preemption, to assess and collect a 911 surcharge from all who can access the service, including VoIP customers. NASUCA supports this position.

## **VII. THE COMMISSION, NOT THE MARKETPLACE, SHOULD DEVELOP STANDARDS FOR VOIP ACCESS BY PERSONS WITH DISABILITIES.**

Despite the spectrum of views submitted in response to the Commission’s *Notice*, there is at least one subject upon which all parties agree: VoIP should be accessible to people with disabilities.<sup>188</sup> In his separate statement to the *Notice*, Chairman Powell stated, “Rules designed to ensure law enforcement access, universal service, disability

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<sup>184</sup> NCTA Comments at 16.

<sup>185</sup> APCO Comments at 9; see also FERUP Comments at 15 (“Regulatory parity argues that those who use the system should, regardless of the platform used, support the system.”); CUB Comments at 27.

<sup>186</sup> APCO Comments at 9.

<sup>187</sup> BRETSA Comments at 4

<sup>188</sup> See, e.g., Verizon Comments at 48; VON Coalition Comments at 25; Comcast Comments at 8; CPUC Comments at 14; Communication Service for the Deaf Comments (“CSD”) at 8.

access and emergency 911 services can and should be preserved in the new architecture.”<sup>189</sup> His sentiment was echoed by an industry-wide consensus that individuals with disabilities must not get left behind as communications technology surges forward. This suggests that all VoIP providers are committed to making their services readily accessible to persons with disabilities. Whether that commitment should be cemented through regulation, however, is in dispute. The Commission should require all VoIP providers to make their VoIP and ancillary IP-enabled services accessible to persons with disabilities and should oversee industry and disabilities group efforts to ensure timely implementation of disability access standards.

Several commenters insist that a healthy dose of market competition will best protect the interests of the disabled in this transition from the traditional PSTN network to the IP platform. The VON Coalition, for example, asserts that disabilities access should result from voluntary agreements, rather than mandatory FCC regulations.<sup>190</sup> Comcast subscribes to a “light-touch” or “hands-off” regulatory regime that underpins the view that “the hallmarks of any new regulatory model should be maximum reliance on the power of a competitive marketplace to deliver the services that consumers want and need.”<sup>191</sup>

Though this “hands-off” approach promises to satisfy many consumers’ wants, it may not satisfy all consumers’ needs, especially those of the oft-neglected disabled. Avaya’s assurance that “VoIP services will provide far greater ... disability access and other public interest benefits and capabilities than traditional telephony services and

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<sup>189</sup> *Notice*, Separate Statement of Michael K. Powell at 1; see also *Notice*, ¶ 42.

<sup>190</sup> VON Coalition Comments at 1, 25.

<sup>191</sup> Comcast Comments at 17.

devices” reflects an optimism shared by many VoIP providers. This optimism fails, however, to address the practical, imminent needs of disabled people, and masks several alarming deficiencies that have already been identified.<sup>192</sup>

For example, Inclusive Technologies asserts that one leading VoIP service provider has designed a peer-to-peer software application that is “completely incompatible with screen readers and provides no support for screen magnification utilities.”<sup>193</sup> Other VoIP providers require their users to perform visual tests in order to register, or use touchscreens to navigate through the software – features that will marginalize a significant number of disabled persons.<sup>194</sup> The American Foundation for the Blind (“AFB”) reaffirms these concerns, predicting that companies currently building the most advanced networks “will not take steps required to make those network features and products fully accessible unless the Commission ensures functional parity and technology neutrality.”<sup>195</sup> The AFB contends, “Voluntary measures and market-based approaches have not, and will not, ensure reliable access to IP-enabled communication for people with disabilities.”<sup>196</sup> Given these advocates’ concerns and experiences, NASUCA agrees that the free market alone is insufficiently disciplined in providing VoIP services to those with disabilities and, accordingly, regulation is necessary.

Not only do past market inadequacies illustrate the need for FCC implementation of industry standards for disability access, they reinforce the need for backward

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<sup>192</sup> Avaya Comments at 3.

<sup>193</sup> Inclusive Technology Comments at 7.

<sup>194</sup> *Id.*

<sup>195</sup> AFB Comments at 1-2.

<sup>196</sup> *Id.* at 2-3.

compatibility. NASUCA's initial comments encouraged the Commission to create forward-looking standards and regulations that provide for backward compatibility "for those consumers with disabilities who cannot afford or will not purchase PCs and Internet connections but choose instead to continue to use Text Telephones (TTYs) over the traditional PSTN."<sup>197</sup> Backward compatibility, or its functional equivalent, should be retained because it allows disabled consumers to benefit from these emerging VoIP technologies and services while enabling them to retain their primary, and in many cases exclusive, means of communication.

NASUCA understands that the Commission will decide whether VoIP should be classified as an "information service" or a "telecommunication service" for regulatory purposes. However, from a disabilities standpoint, there is no functional difference between these two groupings with regard to what they present to the user accessing them. As noted by the CSD, "the regulatory classification of IP-enabled services should turn on its functionalities, not on the nature of its underlying transmissions or the technologies used to send those transmissions."<sup>198</sup> The AFB also warns against constructing a regulatory approach that "shoehorns our needs into the unrelated legacy regulatory regimes that now govern our communications infrastructure."<sup>199</sup>

Understandably, advocates for disability access to VoIP are concerned that if the Commission applies Section 255 only in the telecommunications context, disabled individuals will be denied access to auxiliary and necessary IP-enabled services. To avoid this undesired result, the Commission should read broadly the key terms in Section

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<sup>197</sup> NASUCA Comments at 64.

<sup>198</sup> CSD Comments at ii.

<sup>199</sup> AFB Comments at 2.



255, including “telecommunications services,” “telecommunications equipment,” and “customer premises” to ensure that disabled individuals have access to new and evolving IP-enabled service offerings.

By enacting Section 255, Congress has charged the Commission with ensuring that telecommunications services and equipment are accessible to, and usable by, persons with disabilities. The Commission, in viewing Section 255 through a VoIP lens, will see that voicemail and interactive menus must be accessible, otherwise individuals with disabilities would not have meaningful access to telecommunications services and would not be able to make or complete calls.<sup>200</sup> By framing such “information services” as a necessary means to a compelling “telecommunications” end, the Commission can justify its application of Section 255 disability protections to all IP-enabled services – and not just VoIP.

In sum, the FCC should exercise its Title II authority, or in the alternative its Title I ancillary jurisdiction, to establish a regulatory framework that ensures all VoIP providers meet their public policy obligations of disability access. Disabled individuals must not be treated as mere subjects in VoIP providers’ experimental labs of innovation; rather, the Commission should adopt appropriate standards to ensure that consumers with and without disabilities enjoy the same quality of communications through VoIP.

## **VIII. CONCLUSION**

In considering whether or how to regulate VoIP, the Commission must keep the perspective of the consumer in mind. If VoIP is to be a replacement for traditional

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<sup>200</sup> Self-Help for Hard of Hearing People Comments at 4, 5.

telephone service, the same consumer protections and safety features that are currently available with traditional telephone service must apply to VoIP. Any benefit in new features and services that VoIP may bring must not be diminished by the loss of E911, local number portability, access by those with disabilities or other federal or state consumer protections. The Commission must ensure that consumers can realize all the benefits that VoIP has to offer.

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